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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,196	04/28/2005	Toshiyuki Amagasa	2005-0718A	9014
513	7590	02/01/2006	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			PRESTON, ERIK D	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			2834	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/533,196

Applicant(s)

AMAGASA, TOSHIYUKI

Examiner

Erik D. Preston

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/28/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 7 is objected to because of the following informalities: In the 1st line of the claim, the phrase "The monitor unit..." lacks proper antecedent basis and, for examination purposes, will be interpreted as saying "The motor unit..." Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Baader et al. (US 5954258).

With respect to claim 1, Baader teaches a motor unit integrally comprising a motor (Fig. 1, #30) and a drive control section (Fig. 1, #31) having a control circuit for driving the motor, characterized in that the drive control section includes a first section (Fig. 2, #43); a second circuit component containing section (Fig. 2, #55) three-dimensionally arranged with respect to the first circuit forming section; and a connecting

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line (Fig. 2, #58) arranged between the first and second circuit component containing sections.

With respect to claim 2, Baader teaches the motor of claim 1, wherein the first circuit component containing section includes a printed wiring board, and the second circuit component containing section includes circuit components electrically connected to the printed wiring board through the connecting line.

With respect to claim 3, Baader teaches the motor of claim 2, wherein the printed wiring board and the circuit components are arranged substantially in parallel with each other interposing the connecting line (as seen in Fig. 2).

With respect to claim 4, Baader teaches the motor of claim 1, wherein signal system circuit components are arranged in the first circuit containing section, and power system components are arranged in the second circuit component containing section.

With respect to claim 5, Baader teaches the motor of claim 4, wherein the power system components are directly mounted on the connecting line (as seen in Fig. 2).

With respect to claim 6, Baader teaches the motor of claim 1, wherein the second circuit component containing section is arranged on the outer surface side of the unit with respect to the first circuit component containing section (as seen in Fig. 2).

With respect to claim 7, Baader teaches the motor of claim 1, wherein a heat sink (Fig. 2, #38) is provided outside the second circuit component containing section.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-14 & 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagida et al. (JP 2002-165412 supplied by applicant) in view of Baader et al. (US 5954258).

With respect to claim 8, Yanagida teaches a motor unit comprising: A motor, a case frame which contains a speed reduction mechanism of the motor; and a cover assembly which is fitted to the case frame and contains the drive control section (all of which can be seen in Fig. 2), but it does not teach the motor unit of claim 1. However, Baader teaches the motor unit of claim 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the circuit component containing sections of Yanagida in view of the circuit component containing sections as taught by Baader because they comprise a means for maintaining the operating temperature of the electrical components of the motor unit at an acceptable level by controlled heat transfer and heat dissipation (Baader, Col. 2, Lines 12-31).

With respect to claim 9, Yanagida in view of Baader teaches the motor of claim 8, and Baader teaches that the cover assembly (Fig. 2, #17) has a two-chamber structure in which the first and second circuit component containing sections are arranged three-dimensionally in the upper and lower directions (as seen in Fig. 2).

With respect to claims 10 & 16, Yanagida in view of Baader teaches the motor of claims 8 & 9, and Baader teaches that the cover assembly (Fig. 2, #17) includes a

dividing wall (Fig. 2, #44) that separates the first and second circuit component containing sections from each other.

With respect to claim 11, Yanagida in view of Baader teaches the motor of claim 10, and Baader teaches that the dividing wall has a connection hole (through which the connecting line passes) which communicated the first and second circuit component containing sections (as seen in Fig. 2).

With respect to claims 12 & 17, Yanagida in view of Baader teaches the motor of claims 10 & 11, and Baader teaches that the cover assembly includes a bottom case (Fig. 2, #37) which has the dividing wall, the first circuit component containing section being formed at the position between the dividing wall and the case frame; and a case cover (Fig. 2, #36) which is fitted to the bottom case, the second circuit containing section being formed between the case cover and the dividing wall.

With respect to claim 13, Yanagida in view of Baader teaches the motor of claim 12, and Baader teaches that the power system circuit components are fixed to the inner surface of the case cover (as seen in Fig. 2).

With respect to claims 14 & 18, Yanagida in view of Baader teaches the motor of claims 12 & 13, and Baader teaches that the case cover includes a plurality of fins on an outer surface thereof.

Claims 15, 19 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagida et al. (JP 2002-165412 supplied by applicant) in view of Baader et al. (US 5954258) further in view of Kagaya et al (US 2003/0084677). Yanagida in view of Baader teaches the motor of claims 12-14, and Baader teaches that the case cover is

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made of aluminum (Claim 12), but it does not teach that a black alumite treatment has been applied to the outer surface of the case cover. However, Kagaya teaches a radiation plate with a black alumite treatment (Paragraph 32). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the heat sink of Baader in view of the radiation plate as taught by Kagaya because it effectively receives thermal radiation, has a high emission rate, and provides high thermal conductivity (Kagaya, Paragraph 32); and also because it has been held that one of ordinary skill in the art at the time the invention would choose a suitable and desirable material, because it would be within the general skill of a worker in the art to select a material on the basis of its suitability for the intended use as a matter of obvious design choice (*In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960)).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 4712030, US 4724347, US 5194769, US 5315194, US 6081056, US 6700253, US 6707185, US 2004/0232786 & JP 7-075315.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik D. Preston whose telephone number is 571-272-8393. The examiner can normally be reached on Monday through Friday 8-5.

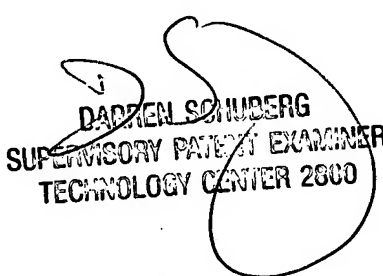
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



01/11/2006



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